Atty. Dkt. No. 029849-0208



E UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Vaillant and Juteau

Title:

METHODS OF IDENTIFYING

**ANTIVIRAL** 

**OLIGONUCLEOTIDES** 

Appl. No.:

10/661,355

Filing Date:

09/12/2003

Examiner:

Art Unit:

1645

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below.

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11-23-04

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.56

Mail Stop Amendment-IDS Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

I The USPTO has waived the requirement under 37 CFR 1.98(a)(2)(i) to submit copies of U.S. patents and U.S. patent application publications when citing and submitting an Information Disclosure Statements in a patent application filed after June 30, 2003 and in an international application that has entered the national stage under 37 USC §371 after June 30, 2003. Accordingly, copies of these types of documents are not being supplied in connection with this application. Reference is being made to OG Notice dated August 5, 2003, Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003.

Applicants submit herewith on Form PTO/SB/08 a listing of the documents cited by or submitted to the U.S. PTO in related application Serial No. 10/661,403 filed 09/12/2003. As provided in 37 CFR §1.98(d), copies of the documents are not being provided since they were

previously submitted to the United States Patent & Trademark Office in that application and are on file with the USPTO.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie art reference against the claims of the present application.

## TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

## RELEVANCE OF EACH DOCUMENT

The relevance of the foreign-language document is explained in the related application.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even

entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872.

Respectfully submitted,

Date November 23, 2004

FOLEY & LARDNER LLP Customer Number: 30542

Telephone: (415) 438-6454 Facsimile: (415) 434-4507 David P. Lentini Attorney for Applicant Registration No. 33,944

MODIFIED PTO/SB/08 (08-00)

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	Substitute for for	AVIA BE	PTO		Complete if Known			
	INFORMATION I	DISCLO	SURE	Application Number	10/661,355			
	STATEMENT BY	APPLI	CANT	Filing Date	09/12/2003			
				First Named Inventor	Andrew Vaillant			
		•		Group Art Unit	1645			
	(use as many shee	ts as ne	cessary)	Examiner Name				
Sheet	1	of	13	Attorney Docket Number	029849-0208			

U.S. PATENT DOCUMENTS								
		U.S. Patent	Document		Date of Publication of	Pages, Columns, Lines,		
Examiner Initials*	Cite No. <sup>1</sup>	Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant o Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear		
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	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document  Office <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>		
	A1	WO	93/24510					-		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A2	AGRAWAL and KANDIMALLA, "Antisense and/or Immunostimulatory Oligonucleotide Therapeutics," Current Cancer Drug Targets 1:197-209 (2001)	
	A3	ALLEN and CHONN, "Large Unilamellar Liposomes with Low Uptake into the Reticuloendothelial System," FEBS Letters 223(1):42-46 (1987)	
	A4	ARCHAMBAULT, et al., "Phosphorothioate oligonucleotides inhibit the replication of lentiviruses and type D retroviruses, but not that of type C retroviruses," Arch Virol 139:97-109 (1994)	

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Examiner Signature	Date Considered	

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	Substitute fo	or form 1449B	/PTO	Complete if Known			
	INFORMATI	ON DISCLO	SURE	Application Number	10/661,355		
	STATEMEN	T BY APPL	CANT	Filing Date	09/12/2003		
				First Named Inventor	Andrew Vaillant		
				Group Art Unit	1645	·	
	(use as many s	sheets as ne	cessary)	Examiner Name			
Sheet	2	of	13	Attorney Docket Number	029849-0208		

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Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
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	A14	CROOKE, S., "Progress in Antisense Technology: The End of the Beginning," Meth. in Enzym. 313:3-45 (1999)	

Examiner Signature		Date Considered	

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1	STATEMENT BY	APPLI	CANT	Filing Date	09/12/2003			
ł				First Named Inventor	Andrew Vaillant	<u> </u>		
į				Group Art Unit	1645			
	(use as many sheets	as ne	cessary)	Examiner Name				
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Signature	Considered	

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	INFORMATION D	ISCLO	SURE	Application Number	10/661,355			
	STATEMENT BY	APPLI	CANT	Filing Date	09/12/2003			
				First Named Inventor	Andrew Vaillant			
				Group Art Unit	1645			
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Sheet	4	of	13	Attorney Docket Number	029849-0208			

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
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Examiner	Date	
Signature	Considered	

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	Substitute for fo	rm 1449B/	PTO	Complete if Known			
	INFORMATION	DISCLO	SURE	Application Number	10/661,355		
	STATEMENT B	BY APPLI	CANT	Filing Date	09/12/2003		
				First Named Inventor	Andrew Vaillant		
				Group Art Unit	1645		
	(use as many she	ets as ne	cessary)	Examiner Name			
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A31	KANDIMALLA, et al., "Effects of Phosphorothioate Oligodeoxyribonucleotide and Oligoribonucleotides on Human Complement and Coagulation," Bioorg. & Med. Chem. Lett. 8:2103-2108 (1998)	
A32	KEAN, et al., "Inhibition of Herpes Simplex Virus Replication by Antisense Oligo-2'-0-methylribonucleoside Methylphosphonates," <i>Biochemistry</i> 34:14617-14620 (1995)	
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Sheet	6	of	13	Attorney Docket Number	029849-0208		

		NON PATENT LITERATURE DOCUMENTS					
Examiner .Initials*	No. 1						
	A39	LERNER, et al., "A Six-Month Trial of Valacyclovir in the Epstein–Barr Virus Subset of Chronic Fatigue Syndrome: Improvement in Left Ventricular Function," <i>Drugs of Today</i> 38(8): 549-561 (2002)					
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Sheet	7	of	13	Attorney Docket Number	029849-0208			

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	s* No.1 No.1 ltem (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue nur publisher, city and/or country where published.						
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Examiner Signature	Date	
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	INFORMATIO	N DISCLO	SURE	Application Number	10/661,355		
STATEMENT BY APPLICANT				Filing Date	09/12/2003		
				First Named Inventor	Andrew Vaillant	· <del>-</del> -	
				Group Art Unit	1645		
	(use as many si	heets as ne	cessary)	Examiner Name			
Sheet	8	of	13	Attorney Docket Number	029849-0208		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A55	MURANISHI, S., "Absorption Enhancers," Crit. Rev. in Ther. Drug Carr. Syst. 7:1-33 (1990)	
	A56	NANDI, et al., "DNA-induced Partial Unfolding of Prion Protein Leads to its Polymerisation to Amyloid," J. Mol. Biol. 322:153-161 (2002)	
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	A60	ORUM and WENGEL, "Locked nucleic acids: A promising molecular family for gene-function analysis and antisense drug development," Curr. Op. in Molecular Ther. 3:239-243 (2001)	
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	A62	PAPAHADJOPOULOS, et al., "Targeting of Liposomes to Tumor Cells in Vivo," Ann. N.Y. Acad. Sci. pp. 64-74 (1987)	

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	INFORMATION D	ISCLO	SURE	Application Number	10/661,355	
	STATEMENT BY	APPLI	CANT	Filing Date	09/12/2003	
				First Named Inventor	Andrew Vaillant	
				Group Art Unit	1645	
	(use as many sheets	s as ne	cessary)	Examiner Name		
Sheet	9	of	13	Attorney Docket Number	029849-0208	

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A63	A63	PEYMAN, et al., "Inhibition of Viral Growth by Antisense Oligonucleotides Directed against the IE110 and the UL30 mRNA of Herpes Simplex Virus Type-1," Biol. Chem. Hoppe-Seyler 376:195-198 (1995)					
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	A67	SANGHVI, Y., "Heterocyclic Base Modifications in Nucleic Acids and Their Applications in Antisense Oligonucleotides," <i>Antisense Research and Applications</i> Ch. 15:273-288 (1993)					
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	A69	SHEA, et al., "Synthesis, hybridization properties and antiviral activity of lipid-oligodeoxynucleotide conjugates," Nucleic Acids Res. 18:3777-3783 (1990)					
- ** - 1	A70	STAHL, et al., "High Incidence of Parvovirus B19 DNA in Synovial Tissue of Patients with Undifferentiated Mono- and Oligoarthritis," Clin. Rheumatol. 19:281-286 (2000)					

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			•	First Named Inventor	Andrew Vaillant		
				Group Art Unit	1645		
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•	A71	STEIN and CHENG, "Antisense Oligonucleotides as Therapeutic Agents-Is the Bullet Really Magical?" Science 261:1004-1012 (1993)	
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•	A79	TAKAKURA, et al., "Uptake Characteristics of Oligonucleotides in the Isolated Rat Liver Perfusion System," Antisense & Nucleic Acid Drug Develpmt. 6:177-183 (1996)	
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	A89	WU, et al., "Increased Microvascular Permeability Contributes to Preferential Accumulation of Stealth Liposomes in Tumor Tissue," Cancer Research 53:3765-3770 (1993)				
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	A93	YU, et al., "Stereo-Enriched Phosphorothioate Oligodeoxynucleotides: Synthesis, Biophysical and Biological Properties," Biorg. & Medicinal Chem. 8:275-284 (2000)				
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Examiner Initials*	Cite No.1					
•	A95	ZHOU and HUANG, "Targeted delivery of DNA by liposomes and polymers," <i>Journ. of Controlled Release</i> 19:269-274 (1992)				
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